

Claims

What is claimed is:

SUB A77

1. An apparatus for use in conjunction with a host device having a receptacle associated therewith, the apparatus comprising:

5 a removable card adaptable for insertion into the receptacle of the host device, the removable card including a processor for running at least one application, and wherein an agent program is downloadable from the removable card to the host device, such that the agent program runs on a processor of the host
10 device and controls communication between the application running on the processor of the removable card and an application running on the processor of the host device.

2. The apparatus of claim 1 wherein the processor of the
15 removable card runs a plurality of applications, and further wherein a plurality of agent programs are downloaded to the host device, one for each of the applications running on the processor of the removable card.

20 3. The apparatus of claim 1 wherein the processor of the removable card runs a plurality of applications, and the agent program controls communication between two or more of the applications and at least one application running on the processor of the host device.

4. The apparatus of claim 1 wherein the agent program interacts with an application programming interface (API) of the host device.

5. The apparatus of claim 1 wherein the agent program controls communication between the application running on the processor of the removable card and each of a plurality of applications running on the processor of the host device.

6. The apparatus of claim 1 wherein communications between the agent program and the application running on the removable card are at least partially encrypted.

7. The apparatus of claim 1 wherein after insertion of the removable card into the receptacle of the host device, a command channel and a data channel are created between the removable card and the host device.

8. The apparatus of claim 7 wherein the processor of the host device runs an agent manager program which receives a message from the application running on the processor of the removable card, the message identifying a particular agent program to be downloaded,

and in response to the message downloads the agent program from a memory of the removable card via the data channel.

9. The apparatus of claim 8 wherein the agent program after
5 being downloaded to the host device sends a message to the application running on the processor of the removable card via the command channel, the message indicating that the agent program is ready to control communication between the application running on the processor of the removable card and the application running on
10 the processor of the host device.

10. The apparatus of claim 1 wherein the host device comprises a digital television receiver, and the application running on the processor of the removable card includes a
15 processing operation for a transport stream.

11. The apparatus of claim 10 wherein the processing operation comprises a decryption operation.

20 12. A method for use in conjunction with a host device having a receptacle associated therewith, the method comprising the step of:

adapting a removable card for insertion into the receptacle of the host device, the removable card including a

processor for running at least one application, and wherein an agent program is downloadable from the removable card to the host device, such that the agent program runs on a processor of the host device and controls communication between the application running on the processor of the removable card and an application running on the processor of the host device.

13. The method of claim 12 wherein the processor of the removable card runs a plurality of applications, and further wherein a plurality of agent programs are downloaded to the host device, one for each of the applications running on the processor of the removable card.

14. The method of claim 12 wherein the processor of the removable card runs a plurality of applications, and the agent program controls communication between two or more of the applications and at least one application running on the host device.

15. The method of claim 12 wherein the agent program interacts with an application programming interface (API) of the host device.

16. The method of claim 12 wherein the agent program controls communication between the application running on the processor of the removable card and each of a plurality of applications running on the processor of the host device.

5

17. The method of claim 12 wherein communications between the agent program and the application running on the removable card are at least partially encrypted.

10 18. The method of claim 12 wherein after insertion of the removable card into the receptacle of the host device, a command channel and a data channel are created between the removable card and the host device.

15 19. The method of claim 18 wherein the processor of the host device runs an agent manager program which receives a message from the application running on the processor of the removable card, the message identifying a particular agent program to be downloaded, and in response to the message downloads the agent program from a
20 memory of the removable card via the data channel.

20. The method of claim 19 wherein the agent program after being downloaded to the host device sends a message to the application running on the processor of the removable card via the

command channel, the message indicating that the agent program is ready to control communication between the application running on the processor of the removable card and the application running on the processor of the host device.

5

21. The method of claim 12 wherein the host device comprises a digital television receiver, and the application running on the processor of the removable card includes a processing operation for a transport stream.

10

22. The method of claim 21 wherein the processing operation comprises a decryption operation.

15

23. An article of manufacture comprising a machine-readable storage medium containing one or more software programs which when executed implement the step of:

20

downloading an agent program from a removable card adaptable for insertion into a receptacle of a host device, the removable card including a processor for running at least one application, such that the agent program runs on a processor of the host device and controls communication between the application running on the processor of the removable card and an application running on the processor of the host device.

24. An apparatus for use in conjunction with a removable card, the apparatus comprising:

a host device having a receptacle associated therewith adaptable to receive the removable card, the host device including a processor for running at least one application, and wherein an agent program is downloadable from the removable card to the host device, such that the agent program runs on the processor of the host device and controls communication between an application running on a processor of the removable card and the application running on the processor of the host device.

25. A method for use in conjunction with a removable card, the method comprising the step of:

adapting a receptacle of a host device for receiving the removable card, the host device including a processor for running at least one application, and wherein an agent program is downloadable from the removable card to the host device, such that the agent program runs on the processor of the host device and controls communication between an application running on a processor of the removable card and the application running on the processor of the host device.